

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Cancel claims 1-3, 5, and 7.

Claim 4 (amended): ~~The imaging lidar of claim 1~~ An imaging lidar comprising:

a pulsed laser for generating at a pulse rate a sequence of light beam pulses each having a pulse width;

a spatial discriminator coupled to the pulsed laser for steering the light beam pulse sequence in a plurality of line scans describing an area surrounding a target, each said line scan including a plurality of said light beam pulses;

a photomultiplier tube for detecting energy from said light beam pulses scattered by said target and for generating an output signal representative of said scattered light beam pulse energy;

an image acquisition controller coupled to said pulsed laser and to said photomultiplier tube for selecting said pulse width and said pulse rate of said light beam pulses and for generating a display signal from said output signal of said photomultiplier tube;

and a display coupled to said controller for generating an image from said display signal representative of said target;

wherein said pulse rate is greater than 600 KHz.

Claim 6 (amended): ~~The imaging lidar of claim 1~~ An imaging lidar comprising:

a pulsed laser for generating at a pulse rate a sequence of light beam pulses each having a pulse width;

a spatial discriminator coupled to the pulsed laser for steering the light beam pulse sequence in a plurality of line scans describing an area surrounding a target, each said line scan including a plurality of said light beam pulses;

a photomultiplier tube for detecting energy from said light beam pulses scattered by said target and for generating an output signal representative of said scattered light beam pulse energy;

an image acquisition controller coupled to said pulsed laser and to said photomultiplier tube for selecting said pulse width and said pulse rate of said light beam pulses and for generating a display signal from said output signal of said photomultiplier tube;

and a display coupled to said controller for generating an image from said display signal representative of said target;

wherein said laser comprises a periodically poled crystal gain element for generating a laser output having a frequency that is a multiple of a pumping frequency.